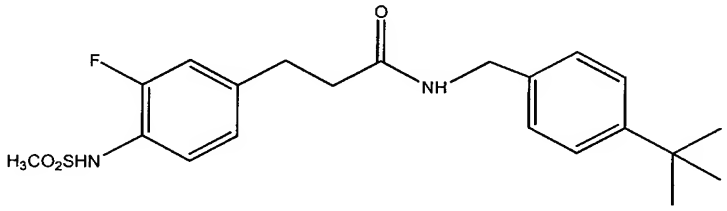
REMARKS

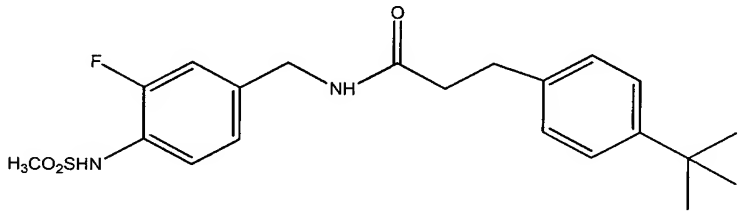
Claims 15-17 and 20-29 are pending. Claim 15 is the only independent claim. Claims 20-21 are withdrawn pursuant to the species election requirement set forth in the Office Action dated April 3, 2009.

Claims 15-17 and 22-29 remain rejected under 35 U.S.C. § 103(a) over WO 2002/016318 ("Suh et al."). Applicants respectfully request the Examiner reconsider and withdraw this obviousness rejection in view of the following remarks and the attached Declaration Under 37 C.F.R. § 1.132 by Dr. Jeewoo Lee ("Declaration").

The Office Action alleges that the presently claimed compounds are obvious over Suh et al.'s compounds of Example 168 and Example 193. The structures of Suh et al.'s compounds of Example 168 and Example 193 are depicted below.



Example 168



Example 193

Suh et al. discloses that its compounds are modulators of the vanilloid receptor. See Abstract.

However, the Office has not established a proper *prima facie* case of obviousness of Suh et al. because one of ordinary skill in the art would not have been motivated to select example compound 168 and example compound 193 of Suh et al. as "lead compounds" for modification to arrive at the presently claimed compounds. The Federal Circuit has consistently held that, for a *prima facie* showing of obviousness based on modification of a structurally similar compound, one of ordinary skill in the art must have been motivated to select the structurally similar compound as a "lead compound." See e.g. *Yamanouchi Pharmaceutical Co. v. Danbury Pharmacal, Inc.*, 231 F.3d 1339, 56 USPQ2d 1641 (Fed. Cir. 2000); *Eli Lilly & Co. v. Zenith Goldline Pharmaceuticals, Inc.*, 471 F.3d 1369, 81 USPQ2d 1324 (Fed. Cir. 2006); and *Takeda Chemical Industries v. Alphapharm Pty., Ltd.*, 492 F.3d 1350, 83 USPQ2d 1169 (Fed. Cir. 2007). However, one of ordinary skill in the art reading Suh et al. would not have been motivated to select either example compound 168 or example compound 193 as a "lead compound."

Suh et al.'s preferred compounds do not include either example compound 168 or example compound 193. See pages 16-19. Moreover, Suh et al. did not show example compound 168 exhibits good activity as the activity of example compound 168 was not tested in the experiments described in Suh et al. Although the activity of example compound 193 was tested in the experiments, example compound 193 exhibited only mediocre antagonistic activity with an IC_{50} value of 0.21 and example compounds 178 and 196 exhibited much better antagonistic activity with IC_{50} values of 0.11 and 0.15, respectively. See Table 1c at pages 220-221. Thus, Suh et al. does not provide a reason to select example compounds 168 and 193 for modification.

Indeed, the Office has not provided any reason that one of ordinary skill in the art would select either example compound 168 or example compound 193 from the 200 exemplary compounds synthesized in Suh et al. For these reasons, Applicants respectfully traverse the Office's assertion of obviousness over Suh et al.

Furthermore, the presently claimed compounds can unexpectedly exhibit outstanding antagonistic activity for the vanilloid receptor (TRPV1) and consequently outstanding analgesic activity. This unexpected outstanding antagonistic activity for TRPV1 effectively rebuts any *prima facie* case of obviousness over Suh et al.

Dr. Lee's Declaration submitted herewith provides comparative data showing that the presently claimed compounds exhibit unexpected outstanding antagonistic activity for TRPV1 compared to Suh et al. example compound 168. As discussed in paragraph 6 of the Declaration, Suh et al.'s example compound 168 and representative compounds N-(4-tert-butylbenzyl)-2-[3-fluoro-4-(methylsulfonylamino)-phenyl]propionamide and N-(4-tert-butylbenzyl)-2(S)-[3-fluoro-4-(methylsulfonylamino)phenyl]propionamide of the presently claimed compounds were tested for antagonistic activity against the human vanilloid receptor (hTRPV1). The tested representative compounds exhibit outstanding hTRPV1 antagonistic activity. While Suh et al.'s example compound 168 is structurally similar, in particular, isomeric to the tested representative compounds, Suh et al.'s example compound 168 exhibits no significant hTRPV1 antagonistic activity. As discussed in paragraph 7 of the Declaration, since a skilled medicinal chemist would expect structurally similar compounds to exhibit similar pharmacological activities, the outstanding hTRPV1 antagonistic activity of the presently claimed compounds is unexpected and surprising. According to Dr. Lee, "[t]here is no way a person skilled in the pharmaceutical arts could have expected or predicted the surprisingly high vanilloid receptor antagonistic activity...based on the disclosure of Suh et al. and the general knowledge of the art."

Therefore, for at least the reasons discussed above, withdrawal of the obviousness rejection over Suh et al. is respectfully requested.

The application is respectfully submitted to be in condition for allowance, and prompt, favorable action thereon is earnestly solicited. If there are any questions regarding this Reply or the application in general, a telephone call to

the undersigned at (202) 624-2845 would be appreciated since this should expedite the examination of the application.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323 (Docket # 106930.57239US).

Respectfully submitted,

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